ABSTRACT

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A device for generating and radiating radio frequencies. The device includes a transmission line, a source, and a means for applying a voltage impulse to the transmission line from a low impedance source. A quarter-wave trap is added between the source and the transmission line to suppress the onset of a parasitic radiating mode. The quarter-wave trap also acts as an antenna to transmit the energy to the surrounding environment from the transmission line, which is behaving as an oscillatory circuit. The low impedance source is an electrically driven impulse generator. As a further modification, a second antenna can be attached to the free end of the transmission line to enable lower frequencies to be transmitted.